

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of:)	
)	
Implementation of Section 309(j) and 337)	WT Docket No. 99-87
of the Communications Act of 1934 as)	
Amended)	
)	

**COMMENTS OF THE NEW YORK CITY TRANSIT AUTHORITY ON THE
NATIONAL PUBLIC SAFETY TELECOMMUNICATIONS COUNCIL
PETITION FOR STAY OF INTERIM NARROWBAND IMPLEMENTATION
DATES**

The New York City Transit Authority (NYCTA) is providing supporting comments to the petition for stay filed by the National Public Safety Telecommunications Council (NPSTC).

BACKGROUND / INTRODUCTION

NYCTA is the nation's largest provider of mass transportation. NYCTA operates its bus and subway operations 24 hours each day, 7 days per week, 365 days per year. In 2008, through its bus and subway system in the City of New York, NYCTA served more than 7.6 million people each working date. The presence and reliability of NYCTA services are essential to the functioning of both the City and the greater metropolitan region. NYCTA is the largest affiliated agency of the Metropolitan Transportation Authority (MTA), which through its various affiliates and subsidiaries provides mass transportation services via bus, subway, and commuter rail operations throughout the metropolitan region. One in three people who use mass transit in the United States do so on a bus, subway or commuter rail facility operated by one of the MTA agencies.

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Like all public safety entities, NYCTA is dependent on consistent, effective, and reliable wireless communications to perform its essential governmental functions. As noted by the Commission in the past, dependence on effective, immediate and reliable wireless communications has become even more important as a result of the events of September 11, 2001.

It is not NYCTA's intent to alarm the public concerning the significant and far reaching consequences of any potential terrorist threat affecting the transportation network of the City of New York. It is, or should be, obvious that even unfounded threats can wreak grave havoc on the life and safety of the public if subway trains and stations must be evacuated safely. Ordinary emergencies, such as a smoke condition or track fire, can quickly escalate into a chaotic situation in the absence of good communications among train crew, passengers and emergency personnel. Even one rush hour subway train may carry between 1000-2000 people, underscoring the direct and immediate impact on life and safety in the event of an emergency. NYCTA's buses and subways have multiple incidents daily requiring the need to summon help, re-route trains, and facilitate the safe movement of passengers away from any potential danger zone. NYCTA emergency response personnel, along with Police, Fire and EMS personnel, must respond immediately to such events in order to protect the safety of NYCTA customers and the public at large. The importance of the availability, access, reliability and level of quality of the NYCTA's radio systems cannot be minimized.

NYCTA's subway radio communications system is considered to operate in one of the most challenging radio environments due to the fact that it provides radio communications coverage to over 880 track miles of the New York City subway system.

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Radio coverage is provided to underground NYCTA subway radio users by means of over 86 radio transceiver locations which connect to approximately 350 miles of radiating antenna cable infrastructure located along the tracks underground. Radio coverage is provided to the outdoor NYCT subway radio service area through over 20 transceivers and additional remote receivers.

The NYCTA subway radio system is a conventional system operating in the VHF radio band presently using 25 KHz radio channels; the radio system operates in three divisions, IRT, BMT, and IND. Over 10,000 mobile/train-mounted and portable hand-held radio units are in service on this radio system among the three divisions. At the present time, NYCTA is poised to issue a comprehensive Request for Proposals to upgrade this subway radio system in order to transition to 12.5 KHz channels in recognition of the Commission's 2013 implementation schedule. NYCTA anticipates receiving proposals in the first quarter of 2010, with an anticipated expenditure of considerably more than \$100 million. The 2013 deadline, while ambitious, has been a factor in planning and developing a framework for the overhaul of the complex VHF radio system utilized throughout the subway system.

COMMENTS ON INTERIM DEADLINES

NYCTA is affected by each of the three interim deadlines occurring on January 1, 2011 identified by the NPSTC petition for stay, namely:

1. Licensees can no longer apply for new or modified license applications that exceed 12.5 KHz or equivalent efficiency

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2. Single-mode and multi-mode transmitters that operate at an efficiency mode exceeding 12.5 KHz can no longer be manufactured in or imported into the United States
3. Manufacturer applications for Part 90 certification must include a spectrum efficiency standard of once voice path per 6.25 KHz of channel bandwidth.

NEW OR MODIFIED LICENSE APPLICATIONS

NYCTA operates many radio stations which support its personnel involved with day-to-day operations, while some of its systems are already narrowband, the primary Subway and Transit Police Radio system operates on VHF conventional channels operating in wideband analog mode with over 10,000 portable/mobile radios. The NYCTA appreciates that modifications will be allowed to existing Federal Communications Commission (FCC) licensed call signs provided that the interference contours are not increased. While this is to an extent comforting, NYCTA believes that the January 1, 2011 date is restrictive to all who maintain radio systems requesting a modification or a new license that will become associated to an existing system. Radio coverage issues in a dense urban area are very complicated and further complicated for NYCTA due to its environment. Agencies that need to maintain a quality of service for its employees relying on its radio system need the flexibility to modify or place into service new base station equipment that may potentially exceed the existing interference contours. Traditional frequency coordination methods which take into account incumbent co-channel and adjacent channel users should be applied in these cases and be left up to the discretion of the frequency coordinators who are already charged by the

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FCC to coordinate spectrum. NYCTA proposes that the FCC accept applications for modified facilities that exceed the 12.5 KHz efficiency and for new facilities that are associated with existing systems through the end of the narrowband mandate deadline date.

MANUFACTURE OR IMPORTATION OF SINGLE-MODE AND MULTI-MODE TRANSMITTERS THAT OPERATE AT AN EFFICIENCY MODE EXCEEDING 12.5 KHz

NYCTA concurs with NPSTC that a stay allowing an agency the ability to purchase equipment that can operate in a mode which exceeds 12.5 KHz is needed to address user operational requirements during transition. The NYCTA radio system operates base station and portable radios, and the present interim date has the potential to preclude NYCTA from providing replacement radios or adding radios to its 25 KHz radio network from January 1, 2011 through January 1, 2013. NYCTA is a self maintained radio service center and its Electronic Maintenance Division routinely replaces base stations in the field when they are damaged or beyond repair. In addition, portable radios are procured annually as new personnel are hired and to replace hand-held radios that become worn out or damaged through normal use in the subway system. NYCTA needs the ability to purchase radios that can operate in 25 KHz analog mode and be compatible with its existing system until NYCTA transitions to a narrowband mode of operation in all of its operational divisions.

**SPECTRUM EFFICIENCY STANDARD OF ONE
VOICE PATH PER 6.25 KHZ OF CHANNEL BANDWIDTH**

NYCTA fully appreciates the compelling need for spectrum efficiency as it operates in one of the most spectrum starved areas of the country. NYCTA believes that the development of practical technologies that are 6.25 KHz compliant have not been fully developed and been tested. While some technologies do exist, they are in their infancy in the United States.

NYCTA operates in one of the most challenging radio frequency environments in the below-ground subway. Standards need to be developed that take into account 6.25 KHz equivalent modulations, such as 4 slot TDMA in 25 KHz and 2 slot TDMA in 12.5 KHz for conventional radio operation, or perhaps larger aggregations of spectrum to be more inline with technology progressions of broader channels rather than narrower channels. These standards need to be evaluated for not only efficiency but for interoperation among other spectrum technologies in the bands which may create noise, intermodulation and interference precluding their effective operation. NYCTA remains concerned that adherence to this interim prong of the Commission order may compel it and other public safety users to expend funds prematurely and unwisely on technology that may not be as robust and as fully tested as is needed. Accordingly, it could find itself in the position of having to expend scarce and precious funds making multiple purchases of equipment before the useful life of such costly equipment has been met.

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SUMMARY

NYCTA is cognizant of the need for, and requirements of, Commission orders to achieve spectrum efficiency, and has undertaken considerable efforts to put in place a costly capital project to modernize its VHF subway radio system to maximize its ability to achieve the narrowband operational objectives in the context of an extraordinarily complex undertaking. It, like many other public sector users, finds itself struggling with the economic fall-out of what has been described as the worst economic crisis since the Great Depression. At the time the Commission issued and re-affirmed its respective orders, it could not have foreseen the events of the last eighteen months—the failures of major financial services entities; the near collapse of the banking system; the need for an unprecedented infusion of capital to stabilize the money markets; a weak dollar; unemployment in double digits and a struggling stock market.

For public entities, the current economic conditions have placed more than considerable strain on their ability to fund construction and capital equipment purchases. It goes without saying that the circumstances leading to a near 30-year high in unemployment rates and near record mortgage foreclosure rates have hampered public entities in two ways: increasing the demand for public assistance and related services, thus driving up costs; and yielding a declining revenue or tax base to meet those demands. Mandates to expend considerable resources at this juncture to purchase equipment that may not yet be ready to pass the test of time and/or may be rendered obsolete would appear to be ill-advised in the current climate. Indeed, given the grave uncertainty of state, municipal and other public budgets, public safety entities may well be confronting an economic perfect storm—declining budgets, increasing demand for

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cost effective provision of governmental services and well-intentioned, but unfunded, interim mandates that will have the effect of expending funds in what may prove to be an unwise manner.

NYCTA subsidies are largely dependent on the overall economic health of the State of New York and the City of New York, as well as a healthy real estate, mortgage and stock market (NYCTA receives certain subsidies from mortgage recording and stock transfer taxes). In the last week alone, the Governor of the State has called its Legislature into extraordinary session and has stated that the State finds itself in the unenviable position of facing a cash crisis within a matter of weeks, and the press has reported that the City is looking at the possibility of layoffs. The property and stock markets have not revived and national economic reports suggest that any recovery will be weak and slow. Against this background, we would urge the Commission to review its interim deadlines to assess the impact they can and will cause to severely strained public sector entities that are already striving to address the need for conversion to narrowband operations.

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Respectfully submitted,

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